
Autodesk® PartMaker® 2018

Quoi de neuf



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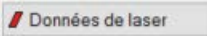
Quoi de neuf dans PartMaker 2018

PartMaker 2018 vous offre toutes les fonctions originales de PartMaker 2017 avec de nombreuses améliorations. Ce document décrit les améliorations les plus significatives.

Usinage laser

L'usinage laser est maintenant supporté par PartMaker/SwissCAM, PartMaker/TurnMill, et PartMaker/Mill pour usiner les formes dans les tubes à parois minces et graver sur le diamètre extérieur des pièces.

Pour créer une opération d'usinage au laser:

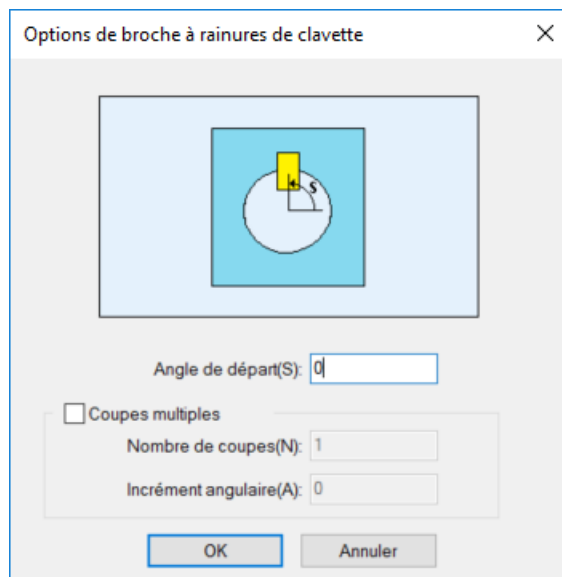
- 1 Créer un de ces groupes de contournage avec une **Stratégie de Laser de contour**:
 - Fraisage XY
 - Plan fraisage 5 axes
 - Fraisage ZY
 - Fraisage face, Polaire
 - Fraisage cylindre
- 2 Créer un outil avec un **Type de Laser**.
- 3 Sur le dialogue **Editer outil**, cliquer sur  pour afficher le nouveau dialogue **Données laser**.
- 4 Utiliser le dialogue **Données laser** pour éditer l'avance et les paramètres de laser pour chaque matière et épaisseur en fonction des recommandations du fabricant du laser.
- 5 Cliquer sur **OK** pour fermer le dialogue.

Brochage pour rainure de clavette

Le brochage pour rainure de clavette est maintenant supporté dans PartMaker.

Pour créer une opération de brochage pour rainure de clavette:

- 1 Dans une configuration **Index fraisage face**, créer un groupe de trous avec un **Type** de **Brochage pour rainure de clavette**.
- 2 Dans le dialogue **Données de cycles**, créer un cycle avec un **Type d'opération** de **Brochage pour rainure de clavette** et un **Cycle fixe** de **Brochage pour rainure de clavette**.
- 3 Cliquer sur **Editer opération perçage** à côté de l'opération *Brochage pour rainure de clavette* pour afficher le dialogue **Editer opération perçage**.
- 4 Cliquer sur **Options de brochage pour rainure de clavette** pour afficher le dialogue **Options de brochage pour rainure de clavette**.



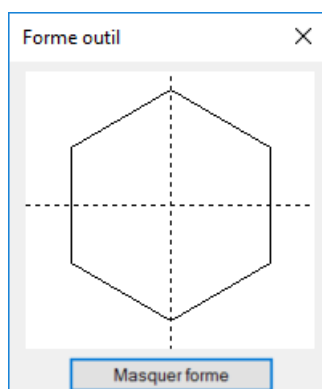
- 5 Dans le champ **Angle de départ (S)**, entrer l'angle avec lequel indexer le brut avant le processus de brochage.
- 6 Sélectionner **Passes multiples**. Les champs **Nombre de passes (N)** et **Incrément angulaire (A)** sont maintenant disponibles.
 - a Dans le champ **Nombre de passes (N)**, entrer le nombre de passes à faire dans l'opération.
 - b Dans le champ **Incrément angulaire (A)**, entrer l'angle avec lequel vous voulez indexer le brut entre chaque passe.
- 7 Cliquer sur **OK** pour fermer le dialogue et retourner sur **Editer opération de perçage**.

Le dialogue **Forme outil** montre le corps d'outil pour les outils de brochage

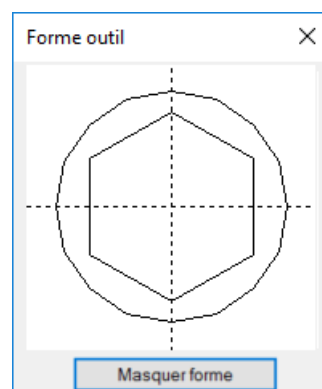
Le dialogue **Forme d'outil** comprend maintenant le corps d'outil pour les outils de brochage.

Cet exemple montre le dialogue **Forme outil** avec un outil Alésage rotatif sélectionné:

Auparavant:



PartMaker 2018:



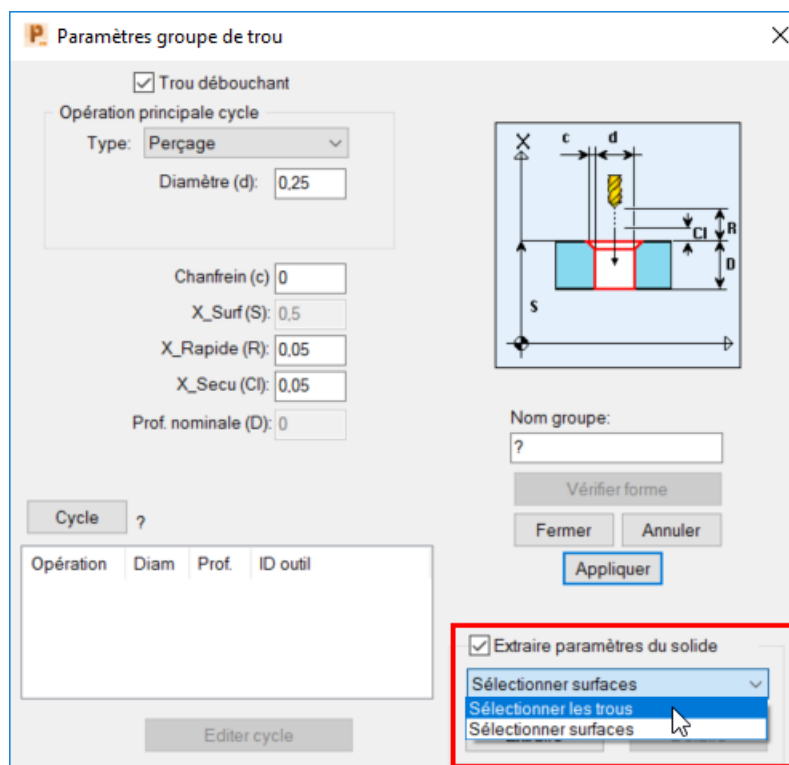
Pour afficher le dialogue **Forme outil**, cliquer sur **Vérifier forme** sur le dialogue **Données outil** ou sur le dialogue **Editer outil**.

Extraire les trous depuis les surfaces de trous partiels

L'Extraction de trou a été améliorée et vous permet d'extraire les trous depuis des surfaces de trous partiels.

Pour créer des trous depuis les surfaces partielles dans les modèles solides:

- 1 Dans le dialogue **Paramètres de groupe de trous**, sélectionner **Extraire paramètres du solide**.
- 2 Sélectionner l'option **Sélectionner surfaces** dans la liste.



- 3 Sélectionner les surfaces définissant le trou.
- 4 Cliquer sur **Extraire** pour calculer les données de trou.

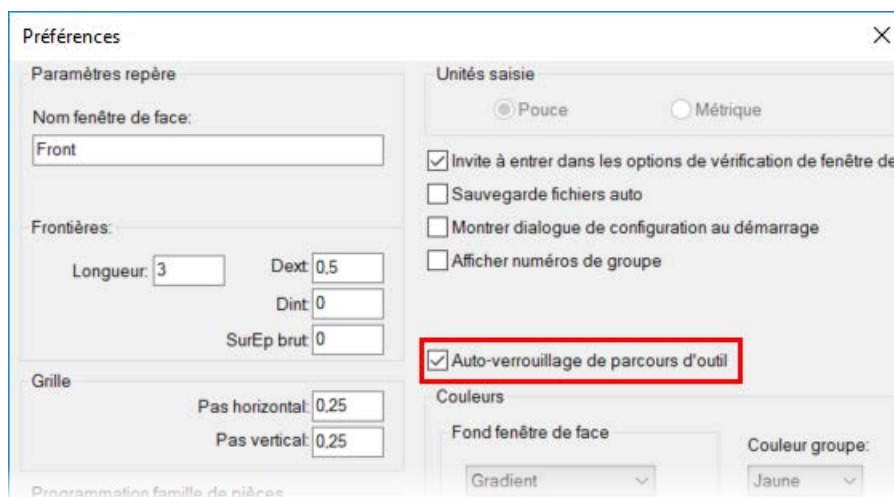
Verrouiller les parcours d'outils

Vous pouvez verrouiller les parcours d'outils pour empêcher PartMaker de les recalculer, même lorsque leurs paramètres sont changés dans le dialogue **Paramètres de groupe de contours**.

Verrouiller les parcours d'outils automatiquement

Vous pouvez maintenant verrouiller les parcours d'outils automatiquement pour éviter d'avoir à ouvrir les groupes pour les verrouiller manuellement.

Sélectionner la nouvelle option **Auto-verrouillage de parcours d'outil** dans le dialogue **Préférences** pour verrouiller les parcours d'outils automatiquement lorsque vous les vérifiez, générez la table de process, générez le code CN ou exécutez une simulation.



Types de parcours d'outils pouvant être verrouillés

Vous pouvez maintenant verrouiller tous les types de parcours d'outil de groupe de contour de fraisage, comprenant:

- Fraisage contour
- Fraisage poche
- Tourteau
- Fraise à fileter

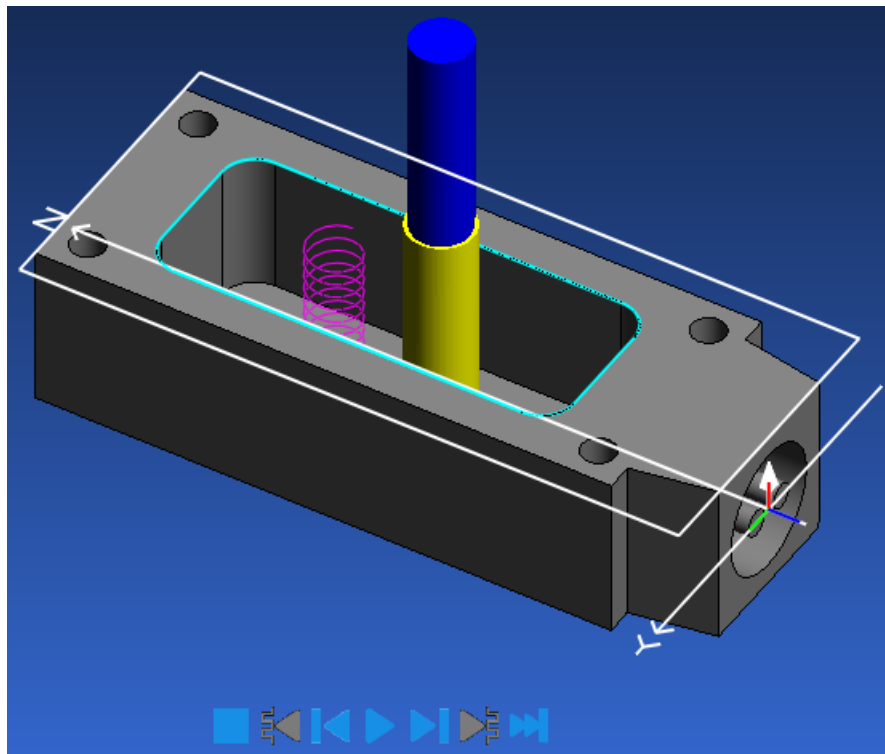
Auparavant, vous pouviez uniquement verrouiller les groupes de contours Usinage de contour avancé et Usinage de poche avancé ainsi que les Groupes d'usinage de surfaces.

Vérifier les parcours d'outils

La vérification de parcours d'outil a été améliorée. Les deux modes de vérification (Vérification Fenêtre face et Fenêtre solides) ont été séparées. Il y a une nouvelle barre d'outils Vérification de solides dans la fenêtre Solides et la position du parcours d'outil actuel est affichée dans la barre d'état.

Pour vérifier une opération dans la fenêtre Solide:

- 1 Sélectionner un groupe dans le panneau Explorateur job
- 2 Faire un clic-droit sur la nouvelle barre d'outils Simulation et sélectionner **Options de vérification de solide** pour définir les options de vérification pour la fenêtre Solides.
- 3 Cliquer sur **Jouer/Pause** sur la barre d'outils Vérification de solides pour commencer la vérification.



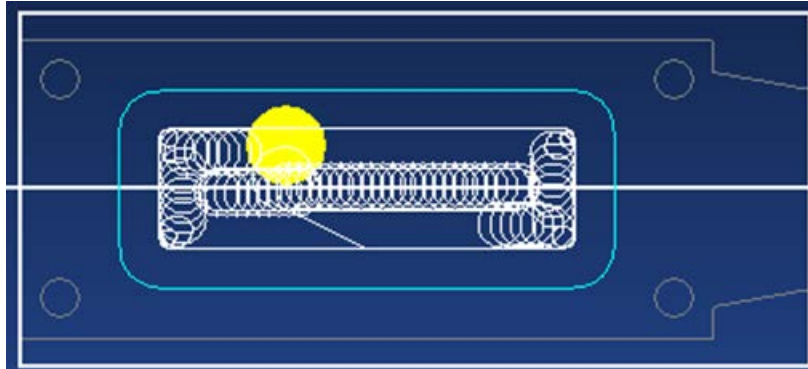
Pour vérifier une opération dans la fenêtre Face:

- 1 Sélectionner un groupe dans le panneau Explorateur job
- 2 Sélectionner **Features pièce > Options vérification de face** pour définir les options de vérification pour la fenêtre Face.



*Auparavant, vous deviez vous rendre sur **Features pièce > Options de vérification**.*

- 3 Sélectionner **Features pièce** > Vérifier parcours du groupe.

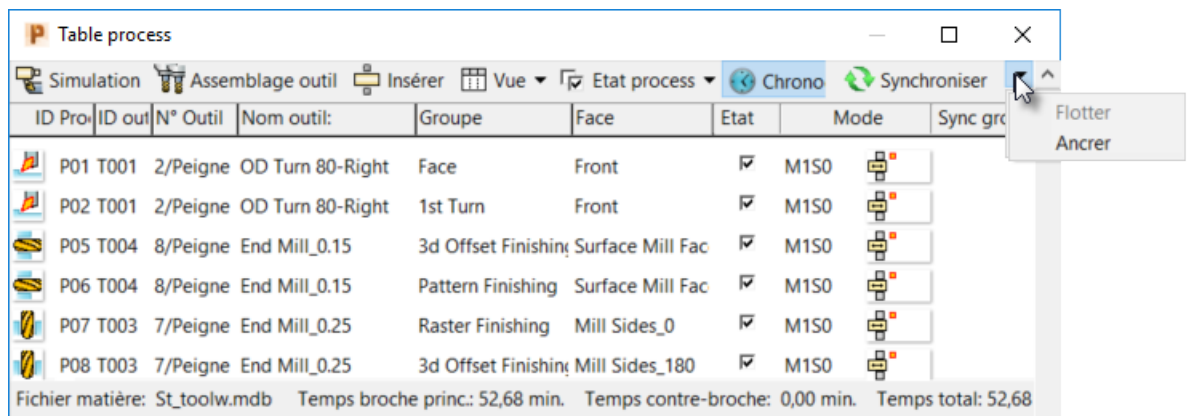


Désactiver l'ancrage des fenêtres

Vous pouvez maintenant détacher les fenêtres Table de process, Simulation et Programme CN, et les déplacer entre les moniteurs. Auparavant, vous pouviez les placer uniquement dans la fenêtre PartMaker.

Utiliser le menu **Position de fenêtre** en haut à droite de la fenêtre et sélectionner :

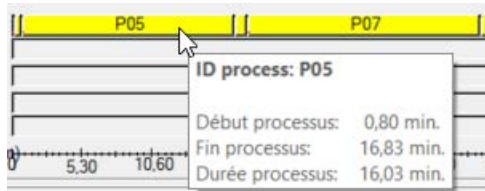
- **Flottant** — Sélectionner pour ouvrir cette fenêtre comme instance séparée afin qu'elle ne soit pas limitée à la fenêtre PartMaker et puisse être déplacée entre les moniteurs.
- **Ancrer** — Sélectionner pour conserver cette fenêtre dans la fenêtre principale de PartMaker.



Améliorations de chronogramme

Il est à présent plus facile de voir et d'éditer des informations pour les process dans le chronogramme.

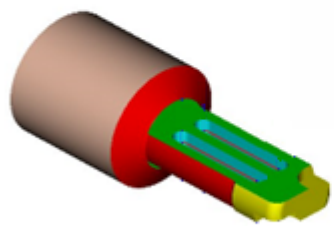
- Déplacer le curseur sur un process affiche maintenant les informations sur ce process.



- Cliquer sur un process affiche le dialogue **Paramètres de process** où vous pouvez éditer les paramètres pour le process.

Feuilles de réglages 3D

Vous pouvez maintenant afficher des vues 3D de la pièce dans la feuille de réglages.

Setup Sheet Job: Reamer				AUTODESK® PARTMAKER® 				
Machine	CNC Demo	Total Cycle Time	1.01min.	Stock Diameter	12.000			
Part Number	1956A	Production Date	12/12/2012	Setup Time	3hrs			
Op. Number	10	Bar Feeder	LNC	Material	303 Stainless			
Customer	PartMaker	Ejection	Pin	Approved By	Engineering			
Main Spindle Processes								
 								
						Tool Name		End Mill
						Tool Number		T0505
						Tool Post		Turret
						Tool Shifts		X 0.0,Y 0.0,Z -15.0
Process Name	Time (min.)	Spindle Speed	Feed Rate	Tool Note				
Mill Slots	0.643	8000rpm	437ipm					

Sélectionner un template dans le dialogue **Générer feuille de réglages** pour inclure une vue 3D dans la feuille de réglages:

- **PRS_process_3d** — Ce template montre une vue 3D de chaque process au fur et à mesure de son usinage.
- **TSS_params10_notes1_sim_3d** — Ce template montre une vue 3D de la pièce terminée.

Améliorations de ConfigPost

Annuler

Vous pouvez maintenant annuler des actions multiples dans ConfigPost plutôt qu'une seule.

Sélectionner **Editer > Annuler** pour inverser les actions d'édition de texte dans la fenêtre active.

Sélectionner **Editer > Refaire** pour refaire les actions que vous avez annulé.

Else

Il y a de nouveaux mots réservés qui vous permettent de créer des expressions logiques plus complexes.

- `<ELSEIF>` — Vérifie que la condition actuelle est vraie si la logique précédente ne l'était pas, et entre le bloc de formatage si la condition actuelle est satisfaite.
- `<ELSEIF>` — Vérifie que la condition actuelle est fausse si la logique précédente n'était pas satisfaite, et entre le bloc de formatage si la condition actuelle est satisfaite.
- `<ELSE>` — Ce bloc est entré lorsque toute la logique précédente n'a pas été satisfaite.

La nouvelle logique `<ELSEIF>` et `<ELSEIFNOT>` peuvent être utilisées comme mot logique, comme `<air-blast>` ou `<larger>`.

Ces nouveaux mots doivent être utilisés entre les lignes `<IF>` et `<ENDIF>` d'un bloc de logique.

Par exemple:

```
<IF><c-axis-main><THEN>
  <IF><c-axis-sub><THEN>
    C-axis-main is on and so is sub<eob>
  <ELSE>
    C-axis-main is on--sub is off<eob>
  <ENDIF>
<ELSEIF><c-axis-sub><THEN>
  C-axis-main is off--sub is on<eob>
<ELSE>
  No c-axis on the machine<eob>
<ENDIF>
```


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